UNITED STATES PATENT AND TRADEMARK OFFICE

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09/503,481	02/14/2000	Hirotaka Shiiyama	862.C1823	6661

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _2/14/2000_ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-115_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-115_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _14 February 2000_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

Specification

1.   The disclosure is objected to because of the following informalities: "Filed of the

Invention" should read Field of the Invention (page 1). Appropriate correction is

required.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. The claim states that when a time difference between scene-

change frames of two scenes in close proximity is less than the specified duration (in

other words, when two or more scene are of lesser duration than the specified duration

to be played for each scene), frames from the scene-change frame of the first scene

through a frame the specified duration from the scene-change frame of the second

scene (in other words, frames beginning at the scene-change frame of the first scene

and continuing through the specified duration past the scene-change frame of the

second scene) are treated as the result of merging the scene change frames. The

phrase "treated as the result of merging the scene change frames" is unclear. Does it

mean that the scene-change frame of the second scene is no longer considered a

scene change frame, and then only frames from the specified duration of the first scene

will be shown? Or, does it mean simply that a shorter length of the first scene will be

shown and then the specified length will be shown of the second scene (if this is what it means, then it is unclear how claim 5 is different from claim 4, and claim 5 has to further limit claim 4)?

4.   Claims 30, 31, 32, 33, 94, 95, 96 and 97 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. They are rejected for the same reasons claim 4 was rejected above.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Saito (5,204,706).

7.   In accordance with Claim 1, Saito discloses a system, with calculating means, which compare similarities among frames; in Saito's system, the encoder 41, of the boundary sensing section 4, performs this function (col. 3 lines 26-34).

8.   Saito further discloses that the system contain determining means, which identifies boundaries in a video, such as a scene, using the result of the calculating means; in Saito's system, the boundary sensor 42, of the boundary sensing section 4, performs this function (col. 3 lines 34-36).

9.   Saito further discloses that the system contain dynamic image means for editing

and preparing the digest; in Saito's system the video is stored after being segmented

into cuts, the CPU then causes a monitor to display the first frame of each cut, or the

user can specify a specific scene or cut within a scene to watch (col. 6 lines 50-55 and

col. 7 lines 46-52).

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

11.   Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Saito in view of Hanpachern (4,319,286).

12.   Saito discloses all the limitations of claim 1 from which claims 2 and 3 depend

(see above). Saito does not directly disclose detection means and processing means

for a blank frame. Hanpachern discloses detection means, which detect a blank scene;

in Hanpachern's system, integrated circuit U1 is used to detect blank frames (col. 4

lines 23-27). Hanpachern also discloses exception processing means, in which the

frame immediately preceding a blank scene is recorded, and the frame immediately

following the blank scene is the next frame to be recorded; in Hanpachern's system,

integrated circuit U2 and transistor Q9 perform this function (col. 4 lines 50-63).

13.   Saito and Hanpachern are compatible because they are from the same field of

endeavor, namely video summary.

14.   Therefore it would have been obvious to one of ordinary skill in the art to add

Hanpachern's method of detecting a blank scene, and editing the scene from the digest

to Saito's system.

15.   The motivation for doing so would have been to eliminate frames with no relevant

information from consideration and therefore to speed up processing and decrease the

time the user needs to find the information he or she is looking for.

16.   Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in

view of Hanpachern in further view of Becker (5,758,181).

17.   Saito and Hanpachern combine to specify all the limitations of claims 1-3 from

which claim 4 depends (see above).

18.   Neither Saito nor Hanpachern discloses that when displaying time differences

between scene-change-frames that are smaller than a specified duration, frames from

the beginning of the first scene through the specified duration from the beginning of the

second frame are treated as the result of merging of the scene-change-frames of the

two scenes. Resulting in a shorter length of the first scene being shown and then the

full, specified length of the second scene being shown.

19.   Becker discloses a system that is used for accelerated presentation of

segmented data (abstract lines 1-2). Becker's system takes data that is segmented with

known boundaries (abstract lines 3-5). The user can be prompted for a desired length

of time by specifying a number of frames (col. 6 lines 50-54). Based on the input from

the user, Becker's system displays a number of frames from each scene in a video

(abstract lines 5-10). When a scene has fewer frames than the number of frames that

the user has specified to be shown (the length of a scene is less than the length specified by the user), Becker discloses preventing overlap by monitoring the position of each frame to be displayed within each scene; Becker displays frames of each scene at specified intervals, if the next frame to be displayed falls outside the current scene, instead of displaying that frame, Becker's system proceeds to the beginning of the next scene thus preventing the display of overlapping scene frames by displaying a shorter length of the first scene and then the full, specified length of the second scene (col. 6 line 50 – col. 7 line 35).

20.   Saito, Hanpachern and Becker are combinable because they are from the same field of endeavor, namely video summary.

21.   Therefore, it would have been obvious to one of ordinary skill in the art to only display a shorter summary of the first scene and then display the full summary of the second scene as disclosed in Becker.

22.   The motivation for doing so would be exclude overlap in the presentation of a video summary, which is obvious, as the intent of a summary is contradicted by the presence of overlap or redundancy.

23.   Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Hanpachern in further view of Becker.

24.   Saito, Hanpachern and Becker combine to specify all the limitations of claim 4 from which claim 5 depends (see above).

25.   Neither Saito nor Hanpachern discloses that when a scene-change of a second scene falls within a specified duration of the scene-change frame of the first scene, only

frames through the scene change frame of the second scene are merged. Resulting in a shorter length of the first scene being shown and then the full, specified length of the second scene being shown.

26.   Becker discloses a system that is used for accelerated presentation of segmented data (abstract lines 1-2). Becker's system takes data that is segmented with known boundaries (abstract lines 3-5). The user can be prompted for a desired length of time by specifying a number of frames (col. 6 lines 50-54). Based on the input from the user, Becker's system displays a number of frames from each scene in a video (abstract lines 5-10). When a scene has fewer frames than the number of frames that the user has specified to be shown (the length of a scene is less than the length specified by the user), Becker discloses preventing overlap by monitoring the position of each frame to be displayed within each scene; Becker displays frames of each scene at specified intervals, if the next frame to be displayed falls outside the current scene, instead of displaying that frame, Becker's system proceeds to the beginning of the next scene thus preventing the display of overlapping scene frames by displaying a shorter length of the first scene and then the full, specified length of the second scene (col. 6 line 50 – col. 7 line 35).

27.   Saito, Hanpachern and Becker are combinable because they are from the same field of endeavor, namely video summary.

28.   Therefore, it would have been obvious to one of ordinary skill in the art to only display a shorter summary of the first scene and then display the full summary of the second scene as disclosed in Becker.

29.   The motivation for doing so would be exclude overlap in the presentation of a video summary, which is obvious, as the intent of a summary is contradicted by the presence of overlap or redundancy.

30.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Saito in view of Hanpachern in further view of Becker in further view of Edgar (5,537,530).

31.   Saito, Hanpachern and Becker combine to specify all the limitations of claims 1-5 from which claim 6 depends (see above).

32.   Saito discloses finding all the scene change frames of a dynamic image (col. 7 lines 34-38). Saito further discloses merging the frames into a digest of the first frame of each scene or a tree structure that allows the user to quickly view each scene (col. 6 lines 50-55 and col. 7 lines 46-52).

33.   Neither Saito nor Hanpachern nor Becker discloses expressly merging frames into a digest beginning with scenes whose scene-change frame has a low degree of similarity to some preceding frames.

34.   Edgar discloses calculating the "change" between a selected image and every other image in a specific cut (col. 12 lines 5-15). He uses this difference to determine what individual frame best represents each scene, which is then displayed (col. 4 lines 15-30). Thus Edgar discloses calculating degrees of similarity among frames and using the data calculated to prepare a digest of one frame.

35.   Edgar is combinable Saito, Hanpachern and Becker because they are from the same field of endeavor, namely video summary.

36.   Therefore, it would have been obvious to one of ordinary skill in the art to use methods presented in Edgar for calculating degrees of similarity among frames to order the presentation of the digest of Saito's system.

37.   The motivation for ordering a digest in this way is given by Edgar who calculates the degrees of similarity in order to present a digest with the most relevant frames (col. 12 lines 5-15).

38.   <u>Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Hanpachern in further view of Becker in further view of Edgar.</u>

39.   Saito, Hanpachern, Becker and Edgar combine to specify all the limitations of claims 1-6 from which claim 7 depends (see above).

40.   In accordance with claim 7, Becker further discloses creating a digest of desired length by allowing the step size between frames to be increased (col. 6 lines 61-65). Thus, Becker's routine will adjust step size until it reaches a predetermined value, which is determined based on the user's input for the number of frames to be included in each scene; so, Becker discloses adjusting the step size to increase the duration of each scene (if the duration is originally below the threshold specified value) to be in accordance with the user's input.

41.   Saito, Hanpachern, Becker and Edgar are combinable because they are from the same field of endeavor, namely video summary.

42.   Therefore, it would have been obvious to one of ordinary skill in the art to use the methods described in Becker to increase the length of the digest to be in accordance with the user's specification for length (number of frames).

43.   The motivation for doing so would have been to present a video display for a
length of time according to the user's desire.

44.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in
view of Hanpachern in further view of Becker in further view of Edgar.

45.   Saito, Hanpachern, Becker and Edgar combine to specify all the limitations of
claims 1-7 from which claim 8 depends (see above).

46.   As in the description in this section for claims 2 and 3, Hanpachern discloses the
detection of blank scenes and editing them out of the digest.

47.   For the same reasons described above in the sections on claims 2 and 3, it
would have been obvious to combine Saito, Hanpachern, Becker and Edgar to to detect
blank scenes and edit them from the digest.

Claim Rejections - 35 USC § 102

48.   Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Saito.

49.   The apparatus of claim 1 teaches the method steps of claim 9. For example, the
calculating means of claim 1 performs the operation of the calculating step of claim 9,
and the determining means of claim 1 performs the operation of the determining step of
claim 9.

Claim Rejections - 35 USC § 103

50.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in
view of Hanpachern.

51.   Claim 10 is a method, which corresponds to the system of claim 2. The functions
carried out by the detecting and exception processing means of claim 2 perform the

operations of the detecting and performing exception processing steps of claim 10,

respectively. Further, since Saito refers to both a system and a method, claim 10 is

rejected for the same reasons claim 2 was rejected above (col. 7 line 62 and col. 9 line

4).

52.   Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in

view of Hanpachern.

53.   Claim 11 is a method, which corresponds to the system of claim 3. The functions

carried out by the exception processing means of claim 3 perform the operations of the

performing exception processing step of claim 11. Further, since Saito refers to both a

system and a method, claim 11 is rejected for the same reasons claim 3 was rejected

above (col. 7 line 62 and col. 9 line 4).

54.   Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Saito in view of Hanpachern in further view of Becker.

55.   Claims 12 and 13 are a method, which correspond to the system of claims 4 and

5. Since Saito refers to both a system and a method, claims 12 and 13 are rejected for

the same reasons claim 4 and 5 were rejected above (col. 7 line 62 and col. 9 line 4).

56.   Claims 14, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Saito in view of Hanpachern in further view of Becker in further view of Edgar.

57.   Claims 14, 15 and 16 are a method, which correspond to the system of claims 6,

7 and 8. Since Saito refers to both a system and a method, claims 14, 15 and 16 are

rejected for the same reasons claim 6, 7 and 8 were rejected above (col. 7 line 62 and

col. 9 line 4).

Claim Rejections - 35 USC § 102

58.   Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Saito.

59.   Saito discloses using a program to control CPU 1 for implementing his method

for controlling his apparatus (col. 2 line 54 – col. 3 line 10). The apparatus of claim 1

and the method of claim 9 teach the steps of the program of claim 17. For example, the

calculating means of claim 1 performs the operation of the calculating step of claim 9

and the calculating step implemented by the program of claim 17, and the determining

means of claim 1 performs the operation of the determining step of claim 9 and the

calculating step implemented by the program of claim 17.

Claim Rejections - 35 USC § 103

60.   Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in

view of Edgar.

61.   In accordance with claim 18, Saito discloses a system, with calculating means,

which compare similarities among frames; in Saito's system, the encoder 41, of the

boundary sensing section 4, performs this function (col. 3 lines 26-34).

62.   Saito further discloses that the system contain determining means, which

identifies boundaries in a video, such as a scene, using the result of the calculating

means; in Saito's system, the boundary sensor 42, of the boundary sensing section 4,

performs this function (col. 3 lines 34-36).

63.   Saito further discloses that the system contain dynamic image means for editing

and preparing the digest; in Saito's system the video is stored after being segmented

into cuts, the CPU then causes a monitor to display the first frame of each cut, or the

user can specify a specific scene or cut within a scene to watch (col. 6 lines 50-55 and col. 7 lines 46-52).

64.   Saito does not disclose expressly merging frames into a digest by based on a low degree of similarity between the frame and some preceding frames.

65.   Edgar discloses calculating the "change" between a selected image and every other image in a specific cut (col. 12 lines 5-15). He uses this difference to determine what individual frame best represents each scene, which is then displayed (col. 4 lines 15-30). Thus Edgar discloses calculating degrees of similarity among frames and using the data calculated to prepare a digest of one frame per scene.

66.   Saito and Edgar are combinable because they are from the same field of endeavor, namely video summary.

67.   Therefore, it would have been obvious to one of ordinary skill in the art to build the digest based on the degree of similarity between frames as calculated by Edgar.

68.   The motivation for doing so would have been to allow the user to create a digest in a way that allows the user to see frames that are less representative of each scene, if for example they are looking for something they know to be unusual occurrence, or if they are searching a long scene for a specific unusual instance.

69.   Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar.

70.   Saito and Edgar combine to disclose all the limitations of claim 18 from which claim 19 depends (see above).

71.   Saito further discloses that upon instructions from the user, the system's dynamic

image means prepares a digest; in Saito's system the user provides instructions via a

mouse 10 or a keyboard (figure 1) then the video is stored after being segmented into

cuts, the CPU then causes a monitor to display the first frame of each cut, or the user

can specify a specific scene or cut within a scene to watch (col. 6 lines 50-55 and col. 7

lines 46-52).

72.   Edgar discloses calculating the "change" between a selected image and every

other image in a specific cut (col. 12 lines 5-15). He uses this difference to determine

what individual frame best represents each scene, which is then displayed (col. 4 lines

15-30). Thus Edgar discloses calculating degrees of similarity among frames and using

the data calculated to prepare a digest of one frame per scene.

73.   The combination of Saito and Edgar is combinable for reasons already given

above.

74.   <u>Claims 22, 23, 26 and 27 are rejected under 35 U.S.C. 103(a) as being</u>

<u>unpatentable over Saito in view of Edgar in further view of Hanpachern.</u>

75.   Saito and Edgar combine to disclose all the limitations of claims 18 and 19 from

which claims 22, 23, 26 and 27 depend (see above). Saito does not directly disclose

detection means and processing means for a blank frame. Hanpachern discloses

detection means, which detect a blank scene; in Hanpachern's system, integrated

circuit U1 is used to detect blank frames (col. 4 lines 23-27). Hanpachern also

discloses exception processing means, in which the frame immediately preceding a

blank scene is recorded, and the frame immediately following the blank scene is the

next frame to be recorded; in Hanpachern's system, integrated circuit U2 and transistor

Q9 perform this function (col. 4 lines 50-63).

76.   Saito, Edgar and Hanpachern are compatible because they are from the same

field of endeavor, namely video summary.

77.   Therefore it would have been obvious to one of ordinary skill in the art to add

Hanpachern's method of detecting a blank scene, and editing the scene from the digest

to Saito and Edgar's system.

78.   The motivation for doing so would have been to eliminate frames with no relevant

information from consideration and therefore to speed up processing and decrease the

time the user needs to find the information he or she is looking for.

79.   Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Saito in view of Edgar in further view of Hanpachern in further view of Becker.

80.   Saito, Edgar and Hanpachern combine to specify all the limitations of claims 26

and 27 from which claims 30 and 31 depend (see above).

81.   Neither Saito nor Edgar nor Hanpachern discloses that when displaying time

differences between scene-change-frames that are smaller than a specified duration,

frames from the beginning of the first scene through the specified duration from the

beginning of the second frame are treated as the result of merging of the scene-change-

frames of the two scenes. Resulting in a shorter length of the first scene being shown

and then the full, specified length of the second scene being shown.

82.   Becker discloses a system that is used for accelerated presentation of

segmented data (abstract lines 1-2). Becker's system takes data that is segmented with

known boundaries (abstract lines 3-5). The user can be prompted for a desired length

of time by specifying a number of frames (col. 6 lines 50-54). Based on the input from

the user, Becker's system displays a number of frames from each scene in a video

(abstract lines 5-10). When a scene has fewer frames than the number of frames that

the user has specified to be shown (the length of a scene is less than the length

specified by the user), Becker discloses preventing overlap by monitoring the position of

each frame to be displayed within each scene; Becker displays frames of each scene at

specified intervals, if the next frame to be displayed falls outside the current scene,

instead of displaying that frame, Becker's system proceeds to the beginning of the next

scene thus preventing the display of overlapping scene frames by displaying a shorter

length of the first scene and then the full, specified length of the second scene (col. 6

line 50 – col. 7 line 35).

83.   Saito, Edgar, Hanpachern and Becker are combinable because they are from the

same field of endeavor, namely video summary.

84.   Therefore, it would have been obvious to one of ordinary skill in the art to only

display a shorter summary of the first scene and then display the full summary of the

second scene as disclosed in Becker.

85.   The motivation for doing so would be exclude overlap in the presentation of a

video summary, which is obvious, as the intent of a summary is contradicted by the

presence of overlap or redundancy.

86.   Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Saito in view of Edgar in further view of Hanpachern in further view of Becker.

87.   Saito, Edgar, Hanpachern and Becker combine to specify all the limitations of

claims 30 and 31 from which claims 34 and 35 depend (see above).

88.   Neither Saito nor Edgar nor Hanpachern discloses that when a scene-change of

a second scene falls within a specified duration of the scene-change frame of the first

scene, only frames through the scene change frame of the second scene are merged.

Resulting in a shorter length of the first scene being shown and then the full, specified

length of the second scene being shown.

89.   Becker discloses a system that is used for accelerated presentation of

segmented data (abstract lines 1-2). Becker's system takes data that is segmented with

known boundaries (abstract lines 3-5). The user can be prompted for a desired length

of time by specifying a number of frames (col. 6 lines 50-54). Based on the input from

the user, Becker's system displays a number of frames from each scene in a video

(abstract lines 5-10). When a scene has fewer frames than the number of frames that

the user has specified to be shown (the length of a scene is less than the length

specified by the user), Becker discloses preventing overlap by monitoring the position of

each frame to be displayed within each scene; Becker displays frames of each scene at

specified intervals, if the next frame to be displayed falls outside the current scene,

instead of displaying that frame, Becker's system proceeds to the beginning of the next

scene thus preventing the display of overlapping scene frames by displaying a shorter

length of the first scene and then the full, specified length of the second scene (col. 6

line 50 – col. 7 line 35).

90.   Saito, Edgar, Hanpachern and Becker are combinable because they are from the same field of endeavor, namely video summary.

91.   Therefore, it would have been obvious to one of ordinary skill in the art to only display a shorter summary of the first scene and then display the full summary of the second scene as disclosed in Becker.

92.   The motivation for doing so would be exclude overlap in the presentation of a video summary, which is obvious, as the intent of a summary is contradicted by the presence of overlap or redundancy.

93.   Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern in further view of Becker.

94.   Saito, Hanpachern and Becker combine to specify all the limitations of claims 34 and 35 from which claims 38 and 39 depend (see above).

95.   Saito discloses finding all the scene change frames of a dynamic image (col. 7 lines 34-38). Saito further discloses merging the frames into a digest of the first frame of each scene or a tree structure that allows the user to quickly view each scene (col. 6 lines 50-55 and col. 7 lines 46-52).

96.   Neither Saito nor Hanpachern nor Becker discloses expressly merging frames into a digest beginning with scenes whose scene-change frame has a low degree of similarity to some preceding frames.

97.   Edgar discloses calculating the "change" between a selected image and every other image in a specific cut (col. 12 lines 5-15). He uses this difference to determine what individual frame best represents each scene, which is then displayed (col. 4 lines

15-30). Thus Edgar discloses calculating degrees of similarity among frames and using the data calculated to prepare a digest of one frame.

98.   Edgar is combinable Saito, Hanpachern and Becker because they are from the same field of endeavor, namely video summary.

99.   Therefore, it would have been obvious to one of ordinary skill in the art to use methods presented in Edgar for calculating degrees of similarity among frames to order the presentation of the digest of Saito's system.

100.   The motivation for ordering a digest in this way is given by Edgar who calculates the degrees of similarity in order to present a digest with the most relevant frames (col. 12 lines 5-15).

101.   <u>Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern in further view of Becker.</u>

102.   Saito, Edgar, Hanpachern and Becker combine to specify all the limitations of claims 38 and 39 from which claims 42 and 43 depend (see above).

103.   In accordance with claims 42 and 43, Becker further discloses creating a digest of desired length by allowing the step size between frames to be increased (col. 6 lines 61-65). Thus, Becker's routine will adjust step size until it reaches a predetermined value, which is determined based on the user's input for the number of frames to be included in each scene; so, Becker discloses adjusting the step size to increase the duration of each scene, if the duration is originally below the threshold specified value, to be in accordance with the user's input.

104.   Saito, Hanpachern, Becker and Edgar are combinable because they are from the

same field of endeavor, namely video summary.

105.   Therefore, it would have been obvious to one of ordinary skill in the art to use the

methods described in Becker to increase the length of the digest to be in accordance

with the user's specification for length (number of frames).

106.   The motivation for doing so would have been to present a video display for a

length of time according to the user's desire.

107.   Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Saito in view of Edgar in further view of Hanpachern in further view of Becker.

108.   Saito, Hanpachern, Becker and Edgar combine to specify all the limitations of

claims 42 and 43 from which claims 46 and 47 depend (see above).

109.   As in the description in this section for claims 26, 27, 30 and 31, Hanpachern

discloses the detection of blank scenes and editing them out of the digest.

110.   For the same reasons described above in the sections on claims 26, 27, 30 and

31, it would have been obvious to combine Saito, Hanpachern, Becker and Edgar to

detect blank scenes and edit them from the digest.

111.   Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in

view of Edgar.

112.   Saito and Edgar combine to disclose all the limitations of claim 18 from which

claim 50 depends (see above). Saito discloses allowing the user to save (store in a

magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

113.   The references are combinable because they are from the same field of

endeavor, namely video summary.

114.   Therefore, it would have been obvious to one of ordinary skill in the art to allow

the user to save the generated video digest as disclosed in Saito.

115.   The motivation for doing so would have been to allow the user to save the file for

future use without having to recreate it every time.

116.   Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in

view of Edgar.

117.   Saito and Edgar combine to disclose all the limitations of claim 19 from which

claim 51 depends (see above). Saito discloses allowing the user to save (store in a

magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

118.   The references are combinable because they are from the same field of

endeavor, namely video summary.

119.   Therefore, it would have been obvious to one of ordinary skill in the art to allow

the user to save the generated video digest as disclosed in Saito.

120.   The motivation for doing so would have been to allow the user to save the file for

future use without having to recreate it every time.

121.   Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in

view of Edgar in further view of Hanpachern.

122.   Saito, Edgar and Hanpachern combine to disclose all the limitations of claim 22

from which claim 54 depends (see above). Saito discloses allowing the user to save

(store in a magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

123.   The references are combinable because they are from the same field of endeavor, namely video summary.

124.   Therefore, it would have been obvious to one of ordinary skill in the art to allow the user to save the generated video digest as disclosed in Saito.

125.   The motivation for doing so would have been to allow the user to save the file for future use without having to recreate it every time.

126.   Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern.

127.   Saito, Edgar and Hanpachern combine to disclose all the limitations of claim 23 from which claim 55 depends (see above). Saito discloses allowing the user to save (store in a magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

128.   The references are combinable because they are from the same field of endeavor, namely video summary.

129.   Therefore, it would have been obvious to one of ordinary skill in the art to allow the user to save the generated video digest as disclosed in Saito.

130.   The motivation for doing so would have been to allow the user to save the file for future use without having to recreate it every time.

131.   Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern.

132.   Saito, Edgar and Hanpachern combine to disclose all the limitations of claim 26 from which claim 58 depends (see above). Saito discloses allowing the user to save (store in a magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

133.   The references are combinable because they are from the same field of endeavor, namely video summary.

134.   Therefore, it would have been obvious to one of ordinary skill in the art to allow the user to save the generated video digest as disclosed in Saito.

135.   The motivation for doing so would have been to allow the user to save the file for future use without having to recreate it every time.

136.   <u>Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern.</u>

137.   Saito, Edgar and Hanpachern combine to disclose all the limitations of claim 27 from which claim 59 depends (see above). Saito discloses allowing the user to save (store in a magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

138.   The references are combinable because they are from the same field of endeavor, namely video summary.

139.   Therefore, it would have been obvious to one of ordinary skill in the art to allow the user to save the generated video digest as disclosed in Saito.

140.   The motivation for doing so would have been to allow the user to save the file for future use without having to recreate it every time.

141.   Claims 62, 63, 66, 67, 70, 71, 74, 75, 78 and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern in further view of Becker.

142.   Saito, Edgar, Hanpachern, and Becker combine to disclose all the limitations of claims 30, 31, 34, 35, 38, 39, 42, 43, 46, and 47 from which claims 62, 63, 66, 67, 70, 71, 74, 75, 78 and 79 depend, respectively (see above). Saito discloses allowing the user to save (store in a magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

143.   The references are combinable because they are from the same field of endeavor, namely video summary.

144.   Therefore, it would have been obvious to one of ordinary skill in the art to allow the user to save the generated video digest as disclosed in Saito.

145.   The motivation for doing so would have been to allow the user to save the file for future use without having to recreate it every time.

146.   Claim 82 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar.

147.   Claims 82 are 83 are a method, which corresponds to the system of claims 18 and 19. The functions carried out by the calculating, determining, and dynamic image means of claims 18 and 19 perform the operations off the calculating, determining, and automatic editing steps of claims 82 and 83, respectively. Further, since Saito discloses both a system and a method, claims 82 and 83 are rejected for the same reasons claims 18 and 19 were rejected above (col. 7 line 62 and col. 9 line 4).

148. Claims 86 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Saito in view of Edgar in further view of Hanpachern.

149. Claims 86 and 87 are a method, which correspond to the system of claims 22

and 23, respectively. The functions carried out by the detecting and exception

processing means of claims 22 and 23 perform the operations of the detecting and

performing exception processing steps of claims 86 and 87, respectively. Further, since

Saito refers to both a system and a method, claims 86 and 87 are rejected for the same

reasons claims 22 and 23 were rejected above (col. 7 line 62 and col. 9 line 4).

150. Claims 90 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Saito in view of Edgar in further view of Hanpachern.

151. Claims 90 and 91 are a method, which correspond to the system of claims 26

and 27, respectively. The functions carried out by the exception processing means of

claims 26 and 27 perform the operations of the performing exception processing step of

claims 90 and 91. Further, since Saito refers to both a system and a method, claims 90

and 91 are rejected for the same reasons claims 26 and 27 were rejected above (col. 7

line 62 and col. 9 line 4).

152. Claims 94, 95, 98, 99, 102, 103, 106, 107, 110 and 111 are rejected under 35

U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of

Hanpachern in further view of Becker.

153. Claims 94, 95, 98, 99, 102, 103, 106, 107, 110 and 111 are a method, which

correspond to the system of claims 30, 31, 34, 35, 38, 39, 42, 43, 46 and 47. Since

Saito refers to both a system and a method, claims 94, 95, 98, 99, 102, 103, 106, 107,

110 and 111 are rejected for the same reasons claims 30, 31, 34, 35, 38, 39, 42, 43, 46

and 47 were rejected above (col. 7 line 62 and col. 9 line 4).

154.   Claim 114 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in

view of Edgar.

155.   Claim 114 specifies a recording medium recording program code for executing

the method of claim 82. Since Saito further discloses using a program to implement his

method, claim 114 is rejected for the same reason claim 82 was rejected above (col. 2

line 54 – col. 3 line 10).

156.   Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in

view of Edgar.

157.   In accordance with claim 20, Saito discloses a system, with calculating means,

which compare similarities among frames; in Saito's system, the encoder 41, of the

boundary sensing section 4, performs this function (col. 3 lines 26-34).

158.   Saito further discloses that the system contain determining means, which

identifies boundaries in a video, such as a scene, using the result of the calculating

means; in Saito's system, the boundary sensor 42, of the boundary sensing section 4,

performs this function (col. 3 lines 34-36).

159.   Saito further discloses that the system contain dynamic image means for editing

and preparing the digest; in Saito's system the video is stored after being segmented

into cuts, the CPU then causes a monitor to display the first frame of each cut, or the

user can specify a specific scene or cut within a scene to watch (col. 6 lines 50-55 and

col. 7 lines 46-52).

160.   Saito does not disclose expressly merging frames into a digest by based on a high degree of similarity between the frame and some preceding frames.

161.   Edgar discloses calculating the "change" between a selected image and every other image in a specific cut (col. 12 lines 5-15). He uses this difference to determine what individual frame best represents each scene, which is then displayed (col. 4 lines 15-30). Thus Edgar discloses calculating degrees of similarity among frames and using the data calculated to prepare a digest of one frame.

162.   Saito and Edgar are combinable because they are from the same field of endeavor, namely video summary.

163.   Therefore, it would have been obvious to one of ordinary skill in the art to build the digest based on the degree of similarity between frames as calculated by Edgar.

164.   The motivation for doing so would have been to allow the user to view a summary of the most representative frames within a scene.

165.   <u>Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar.</u>

166.   Saito and Edgar combine to disclose all the limitations of claim 20 from which claim 21 depends (see above).

167.   Saito further discloses that upon instructions from the user, the system's dynamic image means prepares a digest; in Saito's system the user provides instructions via a mouse 10 or a keyboard (figure 1) then the video is stored after being segmented into cuts, the CPU then causes a monitor to display the first frame of each cut, or the user

can specify a specific scene or cut within a scene to watch (col. 6 lines 50-55 and col. 7

lines 46-52).

168.   Edgar discloses calculating the "change" between a selected image and every

other image in a specific cut (col. 12 lines 5-15). He uses this difference to determine

what individual frame best represents each scene, which is then displayed (col. 4 lines

15-30). Thus Edgar discloses calculating degrees of similarity among frames and using

the data calculated to prepare a digest of one frame per scene.

169.   The combination of Saito and Edgar is combinable for reasons already given

above.

170.   Claims 24, 25, 28 and 29 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Saito in view of Edgar in further view of Hanpachern.

171.   Saito and Edgar combine to disclose all the limitations of claims 20 and 21 from

which claims 24, 25, 28 and 29 depend (see above). Saito does not directly disclose

detection means and processing means for a blank frame. Hanpachern discloses

detection means, which detect a blank scene; in Hanpachern's system, integrated

circuit U1 is used to detect blank frames (col. 4 lines 23-27). Hanpachern also

discloses exception processing means, in which the frame immediately preceding a

blank scene is recorded, and the frame immediately following the blank scene is the

next frame to be recorded; in Hanpachern's system, integrated circuit U2 and transistor

Q9 perform this function (col. 4 lines 50-63).

172.   Saito, Edgar and Hanpachern are compatible because they are from the same

field of endeavor, namely video summary.

173.   Therefore it would have been obvious to one of ordinary skill in the art to add Hanpachern's method of detecting a blank scene, and editing the scene from the digest to Saito and Edgar's system.

174.   The motivation for doing so would have been to eliminate frames with no relevant information from consideration and therefore to speed up processing and decrease the time the user needs to find the information he or she is looking for.

175.   Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern in further view of Becker.

176.   Saito, Edgar and Hanpachern combine to specify all the limitations of claims 28 and 29 from which claims 32 and 33 depend (see above).

177.   Neither Saito nor Edgar nor Hanpachern discloses that when displaying time differences between scene-change-frames are smaller than a specified duration, then frames from the beginning of the first scene through the specified duration from the beginning of the second frame are treated as the result of merging of the scene-change-frames of the two scenes. Resulting in a shorter length of the first scene being shown and then the full, specified length of the second scene being shown.

178.   Becker discloses a system that is used for accelerated presentation of segmented data (abstract lines 1-2). Becker's system takes data that is segmented with known boundaries (abstract lines 3-5). The user can be prompted for a desired length of time by specifying a number of frames (col. 6 lines 50-54). Based on the input from the user, Becker's system displays a number of frames from each scene in a video (abstract lines 5-10). When a scene has fewer frames than the number of frames that

the user has specified to be shown (the length of a scene is less than the length

specified by the user), Becker discloses preventing overlap by monitoring the position of

each frame to be displayed within each scene; Becker displays frames of each scene at

specified intervals, if the next frame to be displayed falls outside the current scene,

instead of displaying that frame, Becker's system proceeds to the beginning of the next

scene thus preventing the display of overlapping scene frames by displaying a shorter

length of the first scene and then the full, specified length of the second scene (col. 6

line 50 – col. 7 line 35).

179.   Saito, Edgar, Hanpachern and Becker are combinable because they are from the

same field of endeavor, namely video summary.

180.   Therefore, it would have been obvious to one of ordinary skill in the art to only

display a shorter summary of the first scene and then display the full summary of the

second scene as disclosed in Becker.

181.   The motivation for doing so would be exclude overlap in the presentation of a

video summary, which is obvious, as the intent of a summary is contradicted by the

presence of overlap or redundancy.

182.   <u>Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable</u>

<u>over Saito in view of Edgar in further view of Hanpachern in further view of Becker.</u>

183.   Saito, Edgar, Hanpachern and Becker combine to specify all the limitations of

claims 32 and 33 from which claims 36 and 37 depend (see above).

184.   Neither Saito nor Edgar nor Hanpachern discloses that when a scene-change of

a second scene falls within a specified duration of the scene-change frame of the first

scene, only frames through the scene change frame of the second scene are merged.

Resulting in a shorter length of the first scene being shown and then the full, specified

length of the second scene being shown.

185.   Becker discloses a system that is used for accelerated presentation of

segmented data (abstract lines 1-2). Becker's system takes data that is segmented with

known boundaries (abstract lines 3-5). The user can be prompted for a desired length

of time by specifying a number of frames (col. 6 lines 50-54). Based on the input from

the user, Becker's system displays a number of frames from each scene in a video

(abstract lines 5-10). When a scene has fewer frames than the number of frames that

the user has specified to be shown (the length of a scene is less than the length

specified by the user), Becker discloses preventing overlap by monitoring the position of

each frame to be displayed within each scene; Becker displays frames of each scene at

specified intervals, if the next frame to be displayed falls outside the current scene,

instead of displaying that frame, Becker's system proceeds to the beginning of the next

scene thus preventing the display of overlapping scene frames by displaying a shorter

length of the first scene and then the full, specified length of the second scene (col. 6

line 50 – col. 7 line 35).

186.   Saito, Edgar, Hanpachern and Becker are combinable because they are from the

same field of endeavor, namely video summary.

187.   Therefore, it would have been obvious to one of ordinary skill in the art to only

display a shorter summary of the first scene and then display the full summary of the

second scene as disclosed in Becker.

188.   The motivation for doing so would be exclude overlap in the presentation of a video summary, which is obvious, as the intent of a summary is contradicted by the presence of overlap or redundancy.

189.   Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern in further view of Becker.

190.   Saito, Hanpachern and Becker combine to specify all the limitations of claims 36 and 37 from which claims 40 and 41 depend (see above).

191.   Saito discloses finding all the scene change frames of a dynamic image (col. 7 lines 34-38). Saito further discloses merging the frames into a digest of the first frame of each scene or a tree structure that allows the user to quickly view each scene (col. 6 lines 50-55 and col. 7 lines 46-52).

192.   Neither Saito nor Hanpachern nor Becker discloses expressly merging frames into a digest beginning with scenes whose scene-change frame has a low degree of similarity to some preceding frames.

193.   Edgar discloses calculating the "change" between a selected image and every other image in a specific cut (col. 12 lines 5-15). He uses this difference to determine what individual frame best represents each scene, which is then displayed (col. 4 lines 15-30). Thus Edgar discloses calculating degrees of similarity among frames and using the data calculated to prepare a digest of one frame.

194.   Edgar is combinable with Saito, Hanpachern and Becker because they are from the same field of endeavor, namely video summary.

195.   Therefore, it would have been obvious to one of ordinary skill in the art to use

methods presented in Edgar for calculating degrees of similarity among frames to order

the presentation of the digest of Saito's system.

196.   The motivation for ordering a digest in this way is given by Edgar who calculates

the degrees of similarity in order to present a digest with the most relevant frames (col.

12 lines 5-15).

197.   Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Saito in view of Edgar in further view of Hanpachern in further view of Becker.

198.   Saito, Edgar, Hanpachern and Becker combine to specify all the limitations of

claims 40 and 41 from which claims 44 and 45 depend (see above).

199.   In accordance with claims 44 and 45, Becker further discloses creating a digest

of desired length by allowing the step size between frames to be increased (col. 6 lines

61-65). Thus, Becker's routine will adjust step size until it reaches a predetermined

value, which is determined based on the user's input for the number of frames to be

included in each scene; so, Becker discloses adjusting the step size to increase the

duration of each scene, if the duration is originally below the threshold specified value,

to be in accordance with the user's input.

200.   Saito, Hanpachern, Becker and Edgar are combinable because they are from the

same field of endeavor, namely video summary.

201.   Therefore, it would have been obvious to one of ordinary skill in the art to use the

methods described in Becker to increase the length of the digest to be in accordance

with the user's specification for length (number of frames).

202.   The motivation for doing so would have been to present a video display for a length of time according to the user's desire.

203.   <u>Claims 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern in further view of Becker.</u>

204.   Saito, Hanpachern, Becker and Edgar combine to specify all the limitations of claims 44 and 45 from which claims 48 and 49 depend (see above).

205.   As in the description in this section for claims 28, 29, 32 and 33, Hanpachern discloses the detection of blank scenes and editing them out of the digest.

206.   For the same reasons described above in the sections on claims 28, 29, 32 and 33, it would have been obvious to combine Saito, Hanpachern, Becker and Edgar to detect blank scenes and edit them from the digest.

207.   <u>Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar.</u>

208.   Saito and Edgar combine to disclose all the limitations of claim 20 from which claim 52 depends (see above). Saito discloses allowing the user to save (store in a magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

209.   The references are combinable because they are from the same field of endeavor, namely video summary.

210.   Therefore, it would have been obvious to one of ordinary skill in the art to allow the user to save the generated video digest as disclosed in Saito.

211.   The motivation for doing so would have been to allow the user to save the file for future use without having to recreate it every time.

212.   Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar.

213.   Saito and Edgar combine to disclose all the limitations of claim 21 from which claim 53 depends (see above). Saito discloses allowing the user to save (store in a magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

214.   The references are combinable because they are from the same field of endeavor, namely video summary.

215.   Therefore, it would have been obvious to one of ordinary skill in the art to allow the user to save the generated video digest as disclosed in Saito.

216.   The motivation for doing so would have been to allow the user to save the file for future use without having to recreate it every time.

217.   Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern.

218.   Saito, Edgar and Hanpachern combine to disclose all the limitations of claim 24 from which claim 56 depends (see above). Saito discloses allowing the user to save (store in a magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

219.   The references are combinable because they are from the same field of endeavor, namely video summary.

220.   Therefore, it would have been obvious to one of ordinary skill in the art to allow the user to save the generated video digest as disclosed in Saito.

221.   The motivation for doing so would have been to allow the user to save the file for future use without having to recreate it every time.

222.   <u>Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern.</u>

223.   Saito, Edgar and <u>Hanpachern</u> combine to disclose all the limitations of claim 25 from which claim 57 depends (see above). Saito discloses allowing the user to save (store in a magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

224.   The references are combinable because they are from the same field of endeavor, namely video summary.

225.   Therefore, it would have been obvious to one of ordinary skill in the art to allow the user to save the generated video digest as disclosed in Saito.

226.   The motivation for doing so would have been to allow the user to save the file for future use without having to recreate it every time.

227.   <u>Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern.</u>

228.   Saito, Edgar and <u>Hanpachern</u> combine to disclose all the limitations of claim 28 from which claim 60 depends (see above). Saito discloses allowing the user to save (store in a magnetic disk) or immediately view the created dynamic image (col. 7 lines 45-50).

229.   The references are combinable because they are from the same field of endeavor, namely video summary.

230.   Therefore, it would have been obvious to one of ordinary skill in the art to allow

the user to save the generated video digest as disclosed in Saito.

231.   The motivation for doing so would have been to allow the user to save the file for

future use without having to recreate it every time.

232.   <u>Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in</u>

<u>view of Edgar in further view of Hanpachern.</u>

233.   Saito, Edgar and <u>Hanpachern</u> combine to disclose all the limitations of claim 29

from which claim 61 depends (see above). Saito discloses allowing the user to save

(store in a magnetic disk) or immediately view the created dynamic image (col. 7 lines

45-50).

234.   The references are combinable because they are from the same field of

endeavor, namely video summary.

235.   Therefore, it would have been obvious to one of ordinary skill in the art to allow

the user to save the generated video digest as disclosed in Saito.

236.   The motivation for doing so would have been to allow the user to save the file for

future use without having to recreate it every time.

237.   <u>Claims 64, 65, 68, 69, 72, 73, 76, 77, 80 and 81 are rejected under 35 U.S.C.</u>

<u>103(a) as being unpatentable over Saito in view of Edgar in further view of Hanpachern</u>

<u>in further view of Becker.</u>

238.   Saito, Edgar, <u>Hanpachern</u>, and Becker combine to disclose all the limitations of

claims 32, 33, 36, 37, 40, 41, 44, 45, 48, and 49 from which claims 64, 65, 68, 69, 72,

73, 76, 77, 80 and 81 depend, respectively (see above). Saito discloses allowing the

user to save (store in a magnetic disk) or immediately view the created dynamic image

(col. 7 lines 45-50).

239.   The references are combinable because they are from the same field of

endeavor, namely video summary.

240.   Therefore, it would have been obvious to one of ordinary skill in the art to allow

the user to save the generated video digest as disclosed in Saito.

241.   The motivation for doing so would have been to allow the user to save the file for

future use without having to recreate it every time.

242.   <u>Claims 84 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable</u>

<u>over Saito in view of Edgar.</u>

243.   Claims 84 are 85 are a method, which corresponds to the system of claims 20

and 21. The functions carried out by the calculating, determining, and dynamic image

means of claims 20 and 21 perform the operations off the calculating, determining, and

automatic editing steps of claims 84 and 85, respectively. Further, since Saito discloses

both a system and a method, claims 84 and 85 are rejected for the same reasons

claims 20 and 21 were rejected above (col. 7 line 62 and col. 9 line 4).

244.   <u>Claims 88 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable</u>

<u>over Saito in view of Edgar in further view of Hanpachern.</u>

245.   Claims 88 and 89 are a method, which correspond to the system of claims 24

and 25, respectively. The functions carried out by the detecting and exception

processing means of claims 24 and 25 perform the operations of the detecting and

performing exception processing steps of claims 88 and 89, respectively. Further, since

Saito refers to both a system and a method, claims 88 and 89 are rejected for the same

reasons claims 24 and 25 were rejected above (col. 7 line 62 and col. 9 line 4).

246.   Claims 92 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Saito in view of Edgar in further view of Hanpachern.

247.   Claims 92 and 93 are a method, which correspond to the system of claims 28

and 29, respectively. The functions carried out by the exception processing means of

claims 28 and 29 perform the operations of the performing exception processing step of

claims 92 and 93. Further, since Saito refers to both a system and a method, claims 92

and 93 are rejected for the same reasons claims 28 and 29 were rejected above (col. 7

line 62 and col. 9 line 4).

248.   Claims 96, 97, 100, 101, 104, 105, 108, 109, 112 and 113 are rejected under 35

U.S.C. 103(a) as being unpatentable over Saito in view of Edgar in further view of

Hanpachern in further view of Becker.

249.   Claims 96, 97, 100, 101, 104, 105, 108, 109, 112 and 113 are a method, which

correspond to the system of claims 32, 33, 36, 37, 40, 41, 44, 45, 48 and 49. Since

Saito refers to both a system and a method, claims 96, 97, 100, 101, 104, 105, 108,

109, 112 and 113 are rejected for the same reasons claims 32, 33, 36, 37, 40, 41, 44,

45, 48 and 49 were rejected above (col. 7 line 62 and col. 9 line 4).

250.   Claim 115 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in

view of Edgar.

251.   Claim 115 specifies a recording medium recording program code for executing

the method of claim 84. Since Saito further discloses using a program to implement his

method, claim 115 is rejected for the same reason claim 84 was rejected above (col. 2 line 54 – col. 3 line 10).

Conclusion and Contact Information

252.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl R. Reitz whose telephone number is (703) 305-8696. The examiner can normally be reached on Monday-Friday 8:00-4:30.

253.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (703) 305-7452. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

254.   Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.

KRR

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